

2. (Amended) The method according to claim 1, wherein said at least one physical catalyst comprises at least one member selected from the group consisting of metals, metal oxides and metal sulfides.

3. (Amended) The method according to claim 1, wherein said electromagnetic spectral pattern is determined by at least one spectroscopy method.

4. (Amended) The method according to claim 1, wherein said chemical reaction system is irradiated with said electromagnetic spectral pattern comprising at least one frequency in a range of from about radio frequency through about ultraviolet frequency.

5. (Amended) The method according to claim 1, wherein said at least one frequency comprises at least one frequency in the visible light range.

6. (Amended) The method according to claim 1, wherein said at least one physical catalyst comprises at least one enzyme.

7. (Amended) The method according to claim 1, further comprising introducing said at least one physical catalyst into said chemical reaction system prior to exposing said chemical reaction system to said at least one frequency of said duplicated electromagnetic spectral pattern.

8. (Amended) The method according to claim 3, wherein said at least one spectroscopy method comprises at least one method selected from the group consisting of x-ray, ultraviolet, microwave, infrared, atomic absorption, flame emissions, atomic emissions, inductively coupled plasma, DC argon plasma, arc-source emission, spark-source emission, high resolution laser and Raman.

9. (Amended) The method according to claim 1, wherein said at least one physical catalyst comprises at least one member selected from the group consisting of silver, platinum, platinum oxide, nickel, palladium, rhodium, copper, ruthenium and iron.

10. (Amended) The method according to claim 1, wherein said electromagnetic energy source comprises at least one laser.

11. (Amended) The method according to claim 1, further comprising introducing said at least one physical catalyst into said chemical reaction system subsequent to exposing said chemical reaction system to said at least one frequency of said duplicated electromagnetic spectral pattern.

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12. (Amended) The method according to claim 1, further comprising introducing said at least one physical catalyst into said chemical reaction system substantially simultaneous with exposing said chemical reaction system to said at least one frequency of said duplicated electromagnetic spectral pattern.

13. (Amended) A method for augmenting at least one physical catalyst in a chemical reaction comprising the steps of:

a) determining at least one frequency selected from the group of frequencies consisting of (a) at least one frequency of a duplicated electromagnetic pattern of said at least one physical catalyst, (b) at least one harmonic frequency of an electromagnetic pattern of said at least one physical catalyst and (c) at least one frequency which copies at least one mechanism of action of said at least one physical catalyst ; and

b) exposing said chemical reaction system to said at least frequency from said group of frequencies, said exposing being sufficient to augment said at least one physical catalyst.

14. (Amended) The method according to claim 13, wherein said at least one frequency of said electromagnetic spectral pattern comprises at least one harmonic frequency of said electromagnetic spectral pattern of said at least one physical catalyst.

15. (Amended) The method according to claim 13, wherein said at least one frequency copies a mechanism of action of said at least one physical catalyst.

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